Recommendations to improve Hispanics participation in NASA's Programs

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Presentation overview

- *Brief description of our institution*
- *Questionnaire results*
- *Specific recommendations*

Good news!!

Because you already mention or discussed all the recommendations I have I will be very brief.

Our Institution

- *The **Inter American University of Puerto Rico** is the **largest private university** of the **Caribbean** and the first higher educational institution outside United States accredited by the Middle States Association.*
- *The university enrollment is over 42,000 students from which **99% are Hispanics**.*

Our Institution

- *This constitutes approximately 25% of the total Island's college students and 40% of the students who attend the Island's private higher education institutions.*
- *The **eleven academic units** of the Inter American University of Puerto Rico (IAUPR) offer a wide variety of **undergraduate** and **graduate programs** in **liberal arts, science** and **technology.***

Inter American University of Puerto Rico, Bayamón Campus

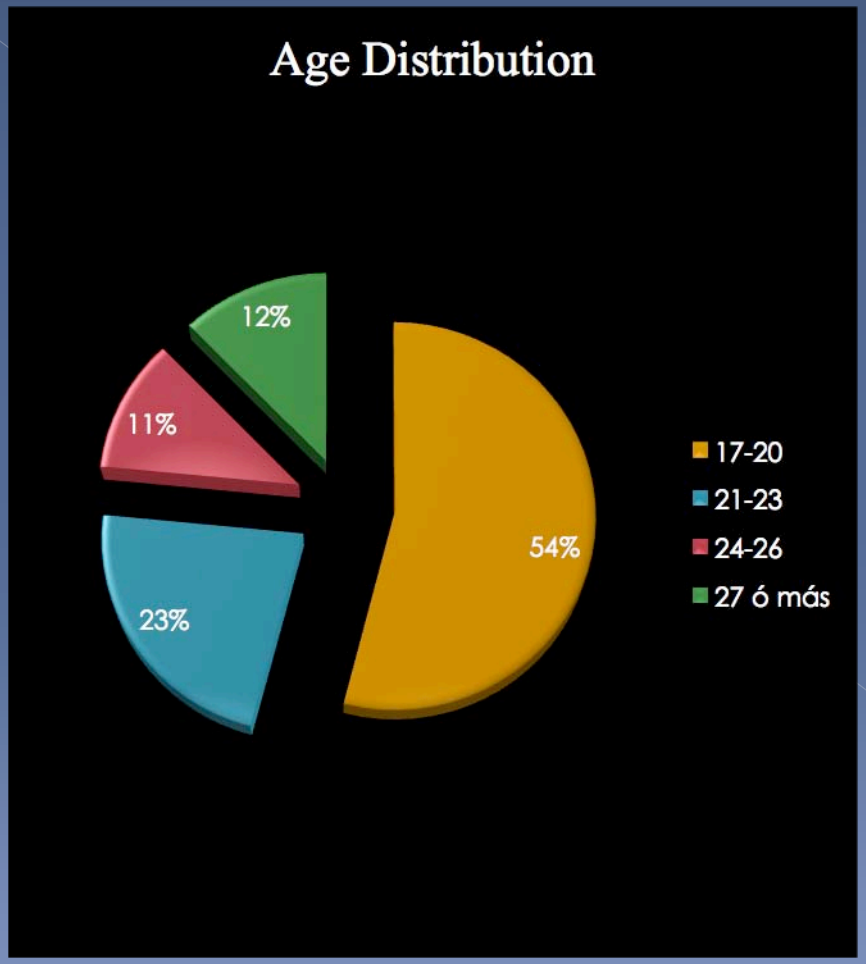
- *The Bayamón Campus is the largest private institution of higher education in the municipality of Bayamón serving more than 5,200 students.*
  - *It is a specialized academic unit of the Inter American University of Puerto Rico system with a **mission focus on business, science and technology programs**.*
  - *In 1997 it moved to its actual campus designed and equipped to incorporate the new technologies to both the curricula and the learning processes.*

Findings about our students knowledge for research opportunities

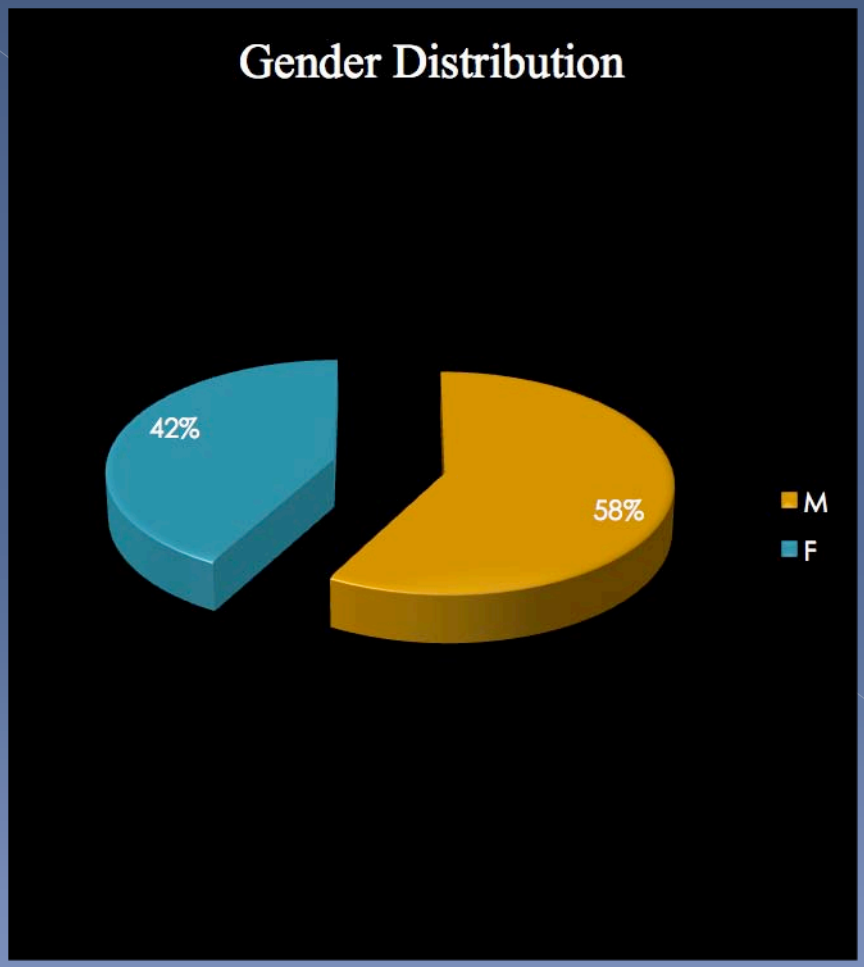
We are in the same planet.

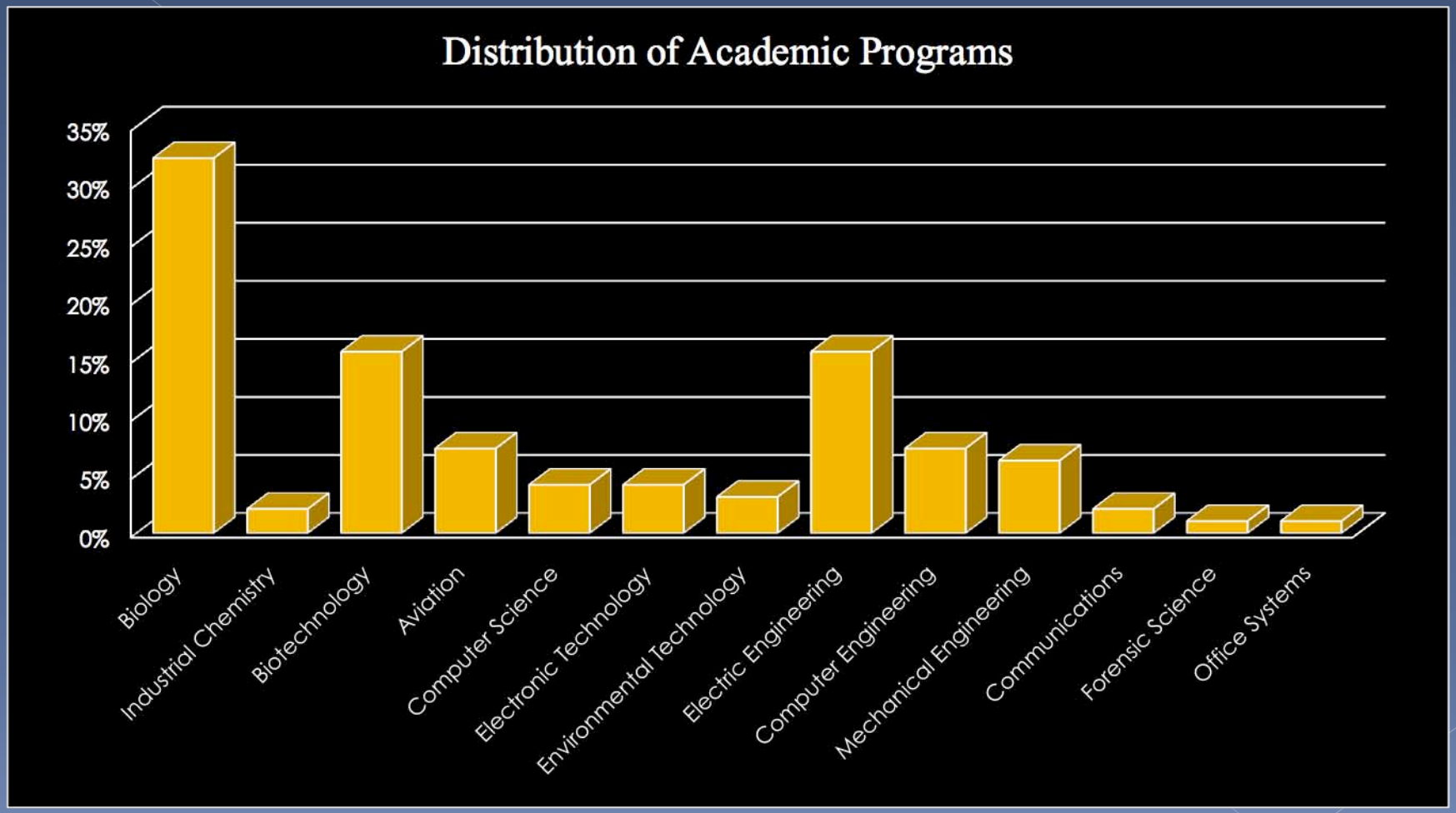
- *A **questionnaire was** administered to 100 students primarily from the areas of engineering, informatics and science.*
- ***Interviews** were made to professors of different areas and to students that participated in NASA's summer internships.*

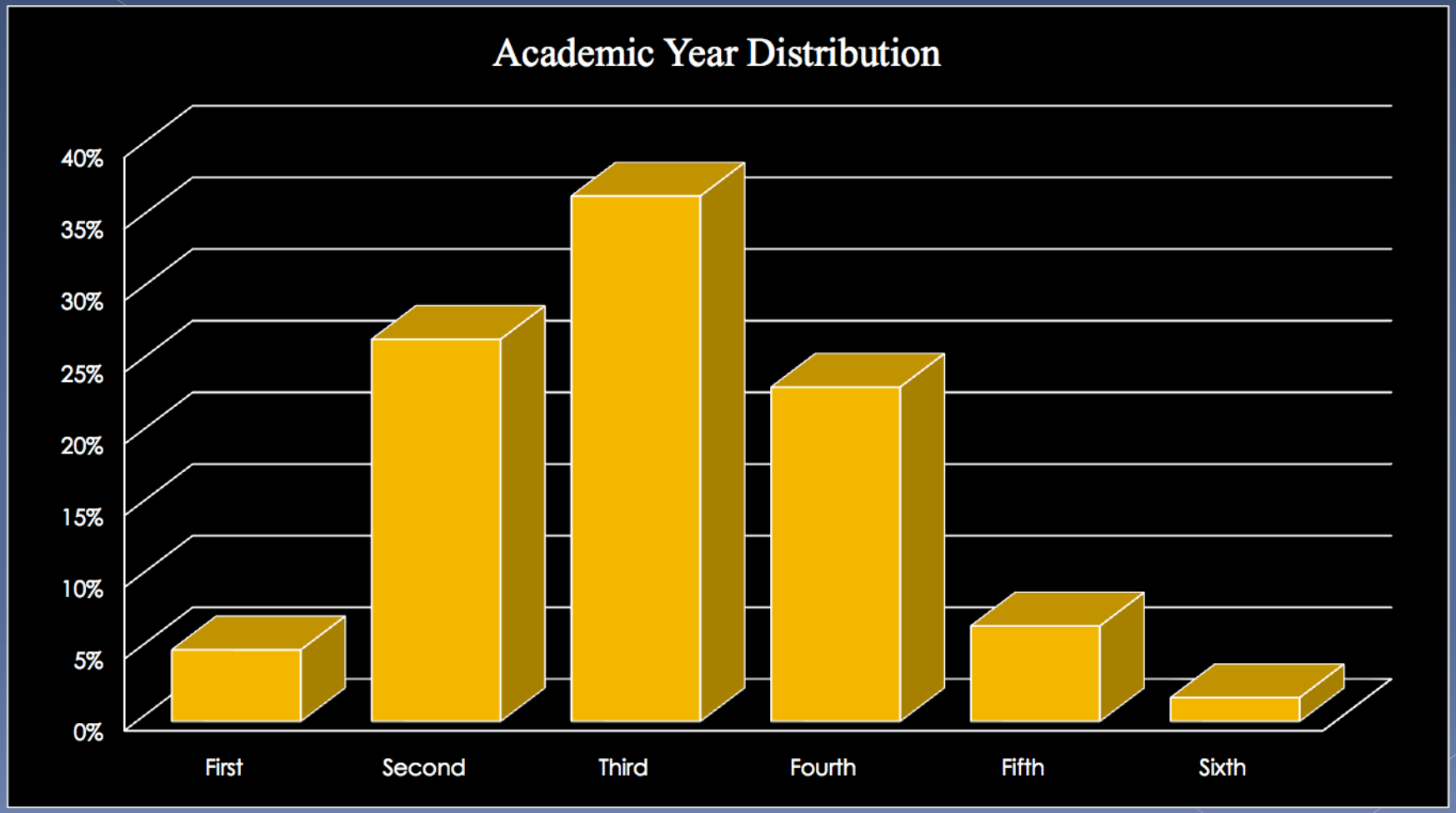
Age Distributions of pool students



Gender Distribution of students



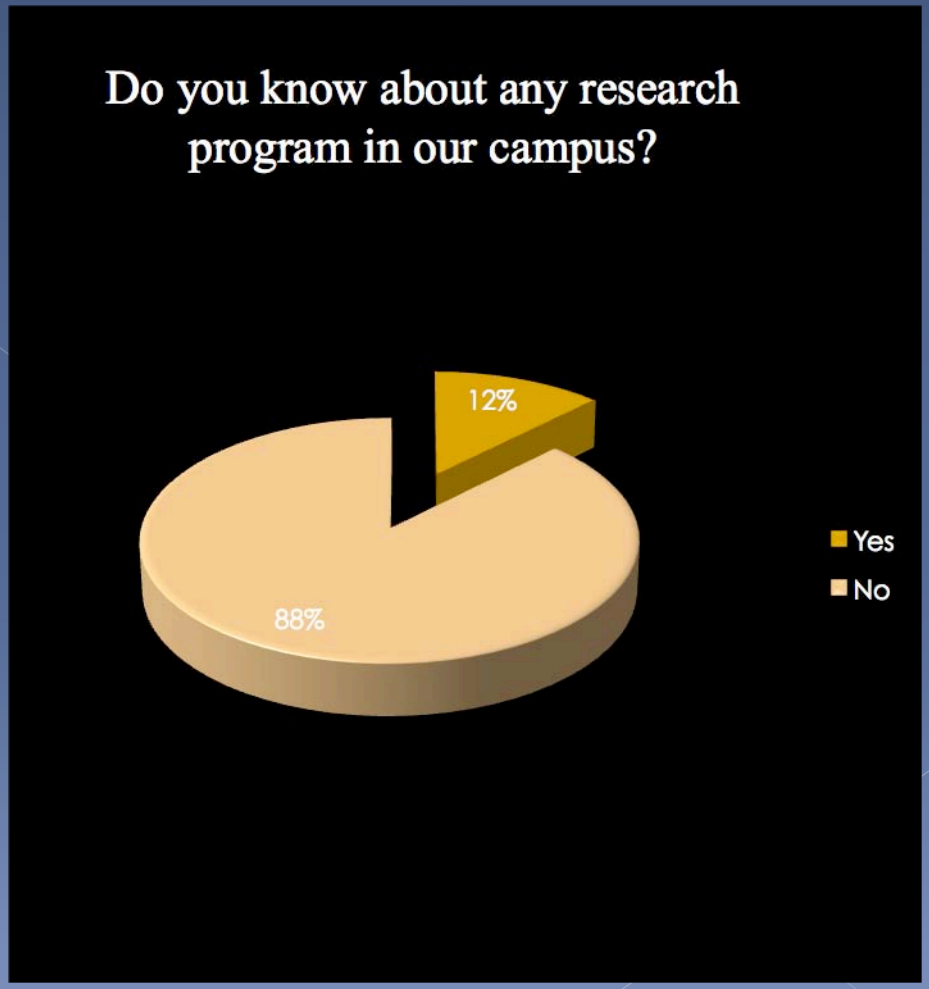

Distribution of Academic Programs
35%
30%
25%
20%
15%
10%
5%
0%
Biology
Industrial Chemistry
Biotechnology
Aviation
Computer Science
Electronic Technology
Environmental Technology
Electric Engineering
Computer Engineering
Mechanical Engineering
Communications
Forensic Science
Office Systems


Academic Year Distribution
40%
35%
30%
25%
20%
15%
10%
5%
0%
First
Second
Third
Fourth
Fifth
Sixth

Challenge

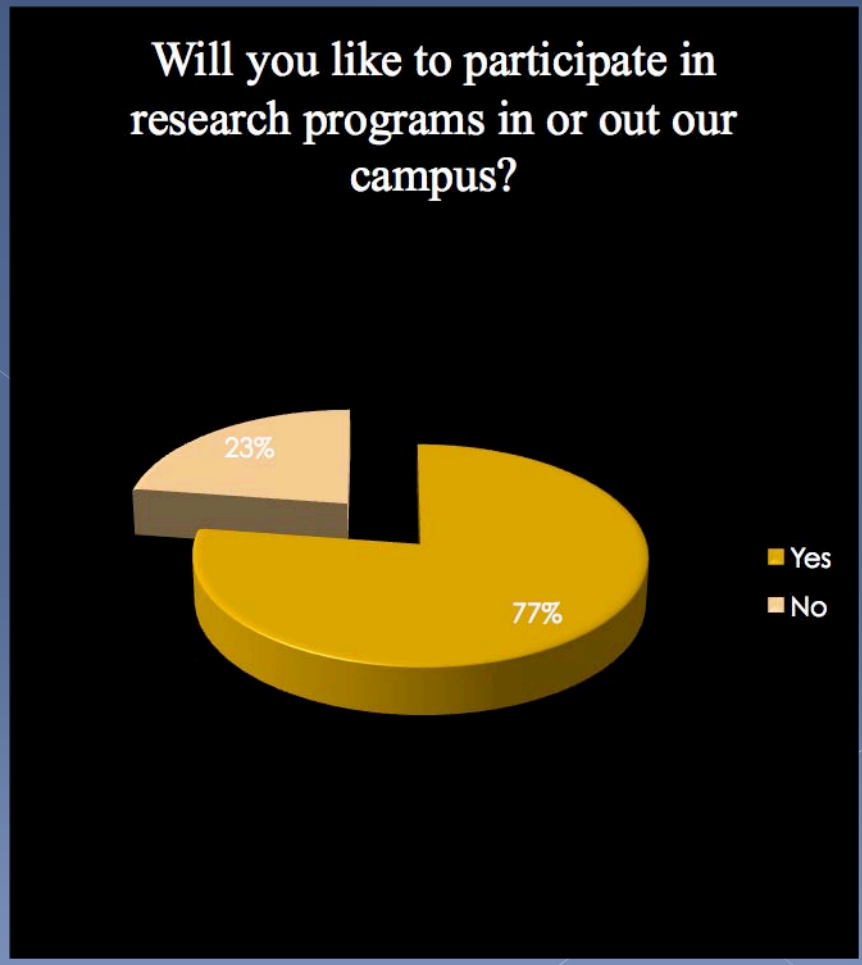
- *One of the biggest challenge is to inform about the different opportunities that students have to participate in research in or out our university.*

- *DISSEMINATION*



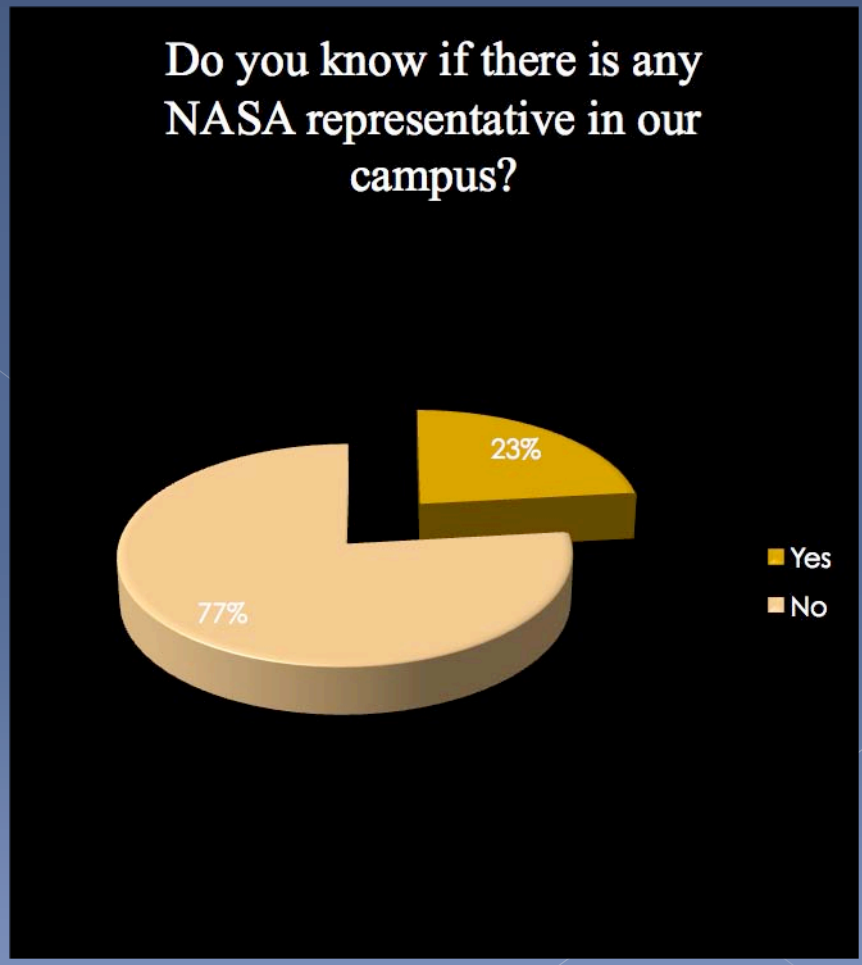
Interest in research participation

- *There is a great interest in participate in research programs in or out the institution.*
- *Some of them mention specifically those on NASA.*



Presence and Dissemination

- *Student's participation in NASA's activities in our institution is low, although there is a NASA representative in it.*
- *One of the biggest* ***challenges*** *is the* ***dissemination*** *of all the* ***opportunities NASA*** *has to offer to our campus community.*



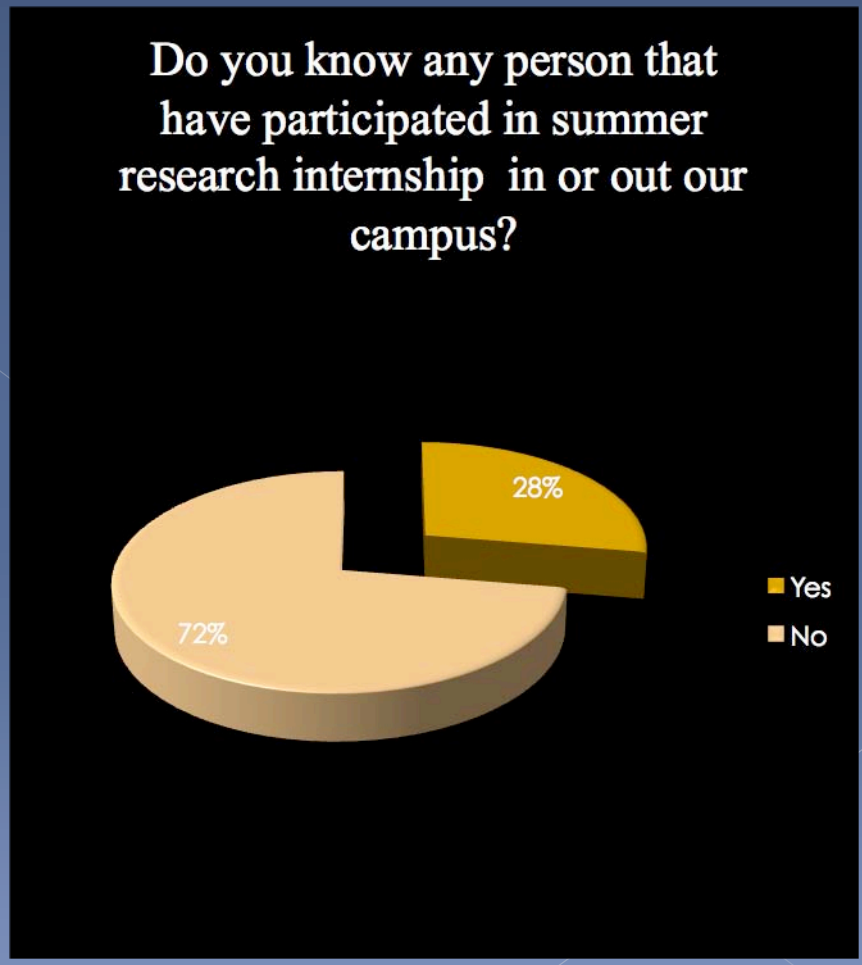
Recommendation

- *Involvement of faculty members of our institution in the dissemination of NASA's activities will increase student's participation in them.*
- *At this moment only a few faculty members have proposal research with NASA or participate in NASA's activities.*

- *MENTORING FACULTY – STUDENT*
  - *FACULTY- FACULTY*

Students Mention the Following Research Institutions:

Washington
Michigan
NASA
Alabama
Maryland
California
Manatí, Puerto Rico (Fideicomiso de Conservación)
Penn State
Purdue
Houston
Orlando
Indiana



Recommendation

Perform an activity with students who have participated in NASA's programs with those who are interested in been involve in NASA's activities.

This will give them the opportunities to exchange experiences one to one.

MENTORING STUDENT TO STUDENT

Fields of research that students will like to participate

- *Zoology*
- *Ecology*
- *Ethology (animal behavior)*
- *Aviation*
- *Molecular biology*
- *Chemistry*
- *Medicine*

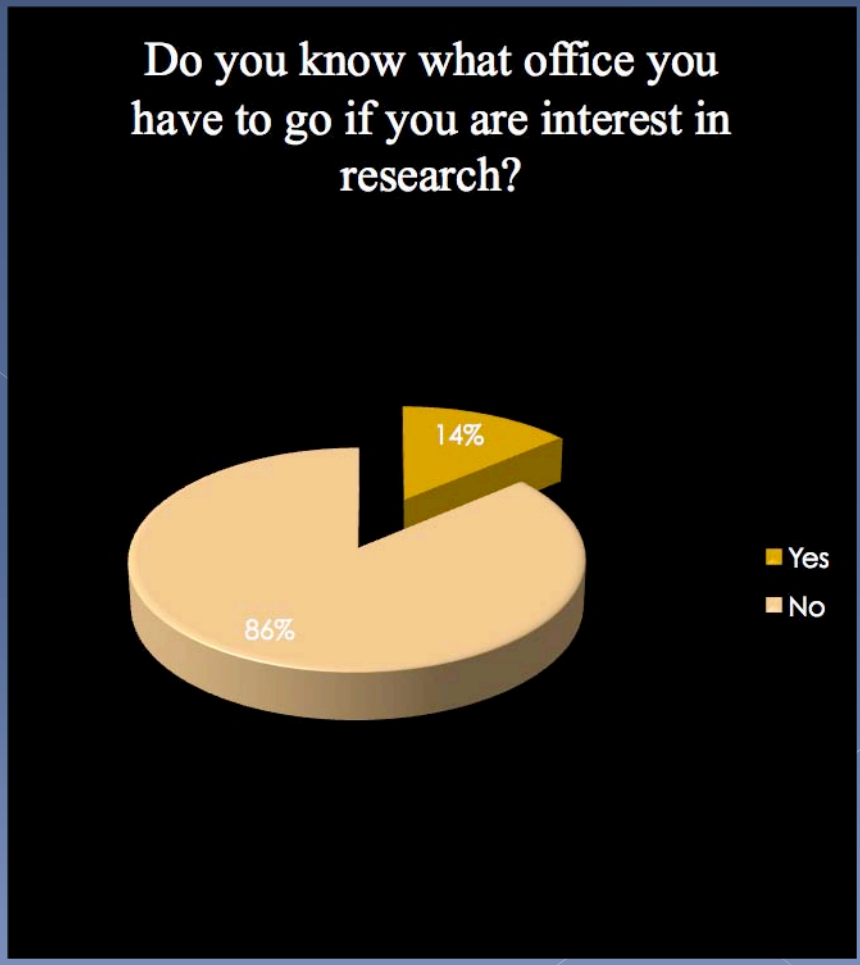
- *Students ask for more information about the opportunities to make research in NASA and other places.*

What research opportunities do you know we have in our campus?

- *Ionosphere*
- *Grid Computing*
- *Cube Sat*
- *Microsatellites*
- *Scientific citizen*
- *INBRE*

Challenge

- *Another challenge is to inform students about the offices or personnel responsible to notify them about these opportunities.*



In conclusion, the following recommendations are made to increase students participation in NASA's programs

Increase faculty opportunity to participate in NASA's activities; this will involve faculty in the dissemination of NASA‘ of them.

*We need more opportunities in which students can **exchange experiences** one to one with those who have participated in NASA's activities.*

***Modify NASA' Home Page**, through the addition of a click bar for minority opportunities.*

*There will be of great help if the **person in contact** with Hispanics should **speak Spanish (language concerns)**.*

Time release *to NASA's representative in the institutions.*

Or it will be great to involve students in the dissemination of NASA's programs.

Also a faculty member or a committee (compose from different curriculum) could work to motivate, help and improve students participation.

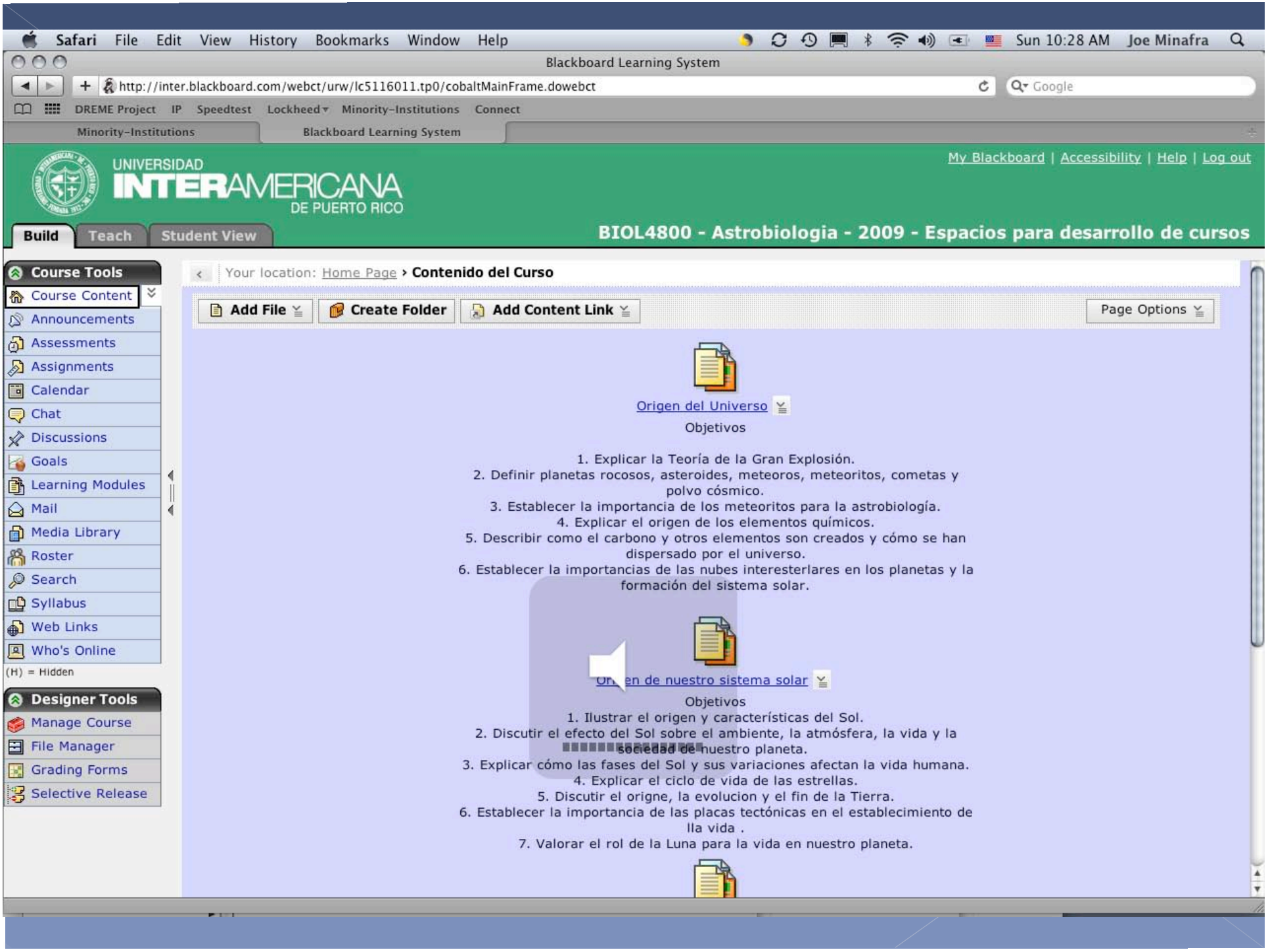
MENTORING

*Promote the visit of **NASA's officer recruitment** to our campus, and other campuses of our institution as well as other **private universities.***

Conclusions

- *We hope that these recommendations will increase the participation of students of private universities from Puerto Rico in NASA's programs.*

- *Thanks to Prof. Rafael Canales (NASA's representative in our institution) for his time and comments.*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Blackboard Learning System
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Google
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Minority-Institutions
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Goals
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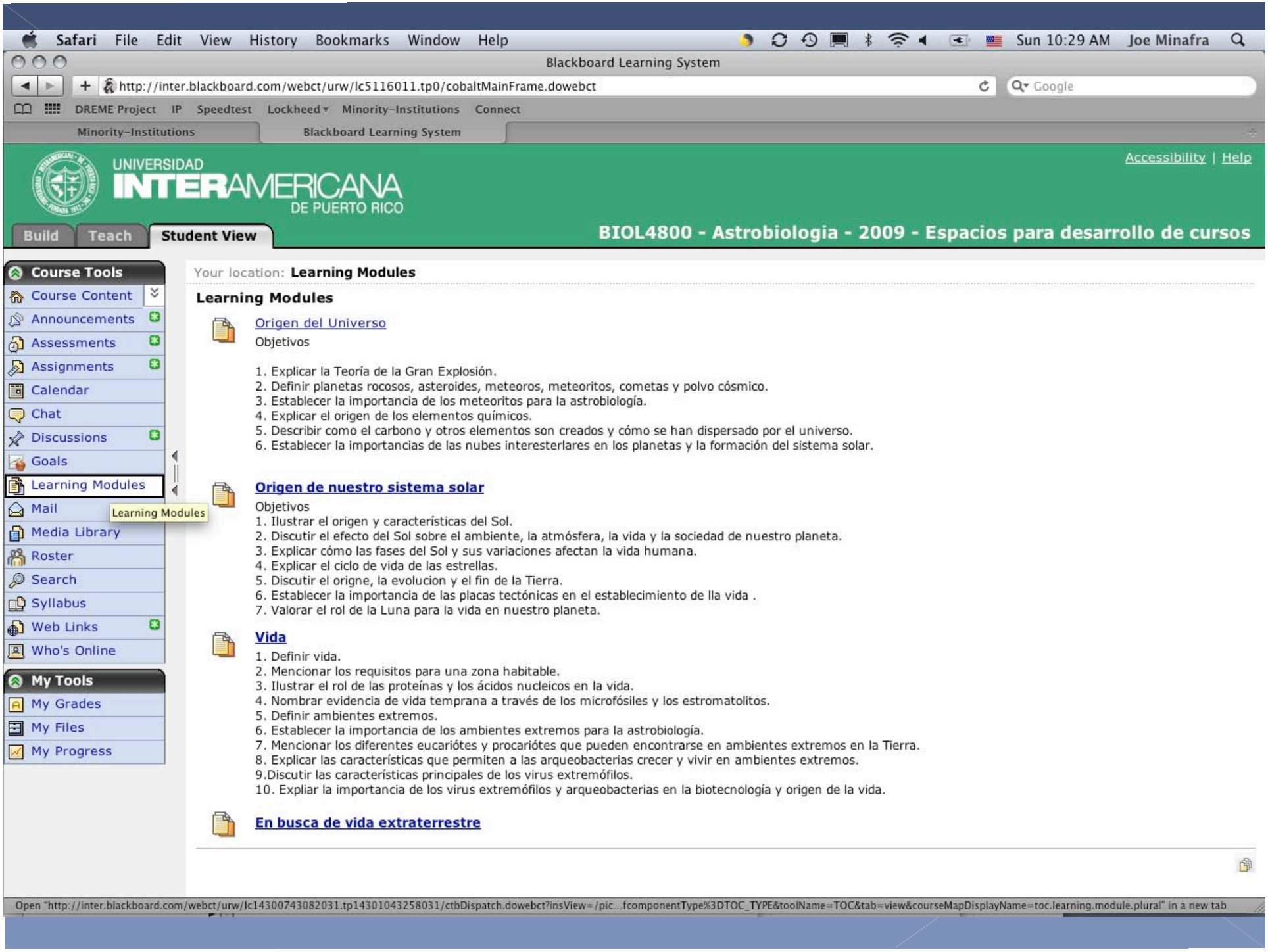
Mail
Media Library
Roster
Search
Syllabus
Web Links
Who's Online
(H) = Hidden
Designer Tools
Manage Course
File Manager
Grading Forms
Selective Release
Your location: Home Page › Contenido del Curso
Add File
Create Folder
Add Content Link
Page Options
Origen del Universo
Objetivos
1. Explicar la Teoría de la Gran Explosión.
2. Definir planetas rocosos, asteroides, meteoros, meteoritos, cometas y polvo cósmico.
3. Establecer la importancia de los meteoritos para la astrobiología.
4. Explicar el origen de los elementos químicos.
5. Describir como el carbono y otros elementos son creados y cómo se han dispersado por el universo.
6. Establecer la importancias de las nubes interesterlares en los planetas y la formación del sistema solar.
Origen de nuestro sistema solar
Objetivos
1. Ilustrar el origen y características del Sol.
2. Discutir el efecto del Sol sobre el ambiente, la atmósfera, la vida y la sociedad de nuestro planeta.
3. Explicar cómo las fases del Sol y sus variaciones afectan la vida humana.
4. Explicar el ciclo de vida de las estrellas.
5. Discutir el origne, la evolucion y el fin de la Tierra.
6. Establecer la importancia de las placas tectónicas en el establecimiento de lla vida .
7. Valorar el rol de la Luna para la vida en nuestro planeta.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Blackboard Learning System
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Assignments
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Discussions
Goals
Learning Modules
Mail
Media Library
Roster
Search
Syllabus
Web Links
Who's Online
My Tools
My Grades
My Files
My Progress
Learning Modules
Your location: Learning Modules
Learning Modules
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Vida
1. Definir vida.
2. Mencionar los requisitos para una zona habitable.
3. Ilustrar el rol de las proteínas y los ácidos nucleicos en la vida.
4. Nombrar evidencia de vida temprana a través de los microfósiles y los estromatolitos.
5. Definir ambientes extremos.
6. Establecer la importancia de los ambientes extremos para la astrobiología.
7. Mencionar los diferentes eucariótes y procariótes que pueden encontrarse en ambientes extremos en la Tierra.
8. Explicar las características que permiten a las arqueobacterias crecer y vivir en ambientes extremos.
9.Discutir las características principales de los virus extremófilos.
10. Expliar la importancia de los virus extremófilos y arqueobacterias en la biotecnología y origen de la vida.
En busca de vida extraterrestre
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